

Claims

- [c1] What is claimed is:
1. A method for synchronizing a hyperframe number (HFN) between peer radio bearers (RBs) respectively supported by a user equipment (UE) and a Universal Terrestrial Radio Access Network (UTRAN), the peer RBs created by a Radio Bearer Setup procedure performed in conjunction with a Serving Radio Network Subsystem (SRNS) relocation procedure, the method comprising:
sending a Radio Bearer Setup message from the UTRAN to the UE, the Radio Bearer Setup message indicating that SRNS relocation is to be performed and that a new RB is to be established in a first domain;
in response to the Radio Bearer Setup message, the UE assigning a first START value to a START_VALUE_TO_TRANSMIT variable according to the HFNs of all established RBs in the first domain;
the UE utilizing the START_VALUE_TO_TRANSMIT variable to set an HFN of the new RB;
in response to the Radio Bearer Setup message, the UE generating a START list containing a plurality of entries corresponding to a plurality of domains, the plurality of domains including the first domain;
the UE filling the entries with corresponding START values, wherein the UE synchronizes the entry corresponding to the first domain to hold a value that is identical to the value of the START_VALUE_TO_TRANSMIT variable;
in response to the Radio Bearer Setup message, the UE composing a reply message, the reply message including the START list; and
the UE sending the reply message to the UTRAN.
 - [c2] 2. The method of claim 1 where the UE assigns the first START value to the entry corresponding to the first domain in the START list.
 - [c3] 3. The method of claim 1 where the UE assigns the START value of the entry in the START list corresponding to the first domain to the START_VALUE_TO_TRANSMIT variable.
 - [c4] 4. A wireless device comprising a central processing unit (CPU) in electrical communications with a memory, the memory comprising program code for

implementing the method of claim 1.

- [c5] 5. A method for synchronizing a hyperframe number (HFN) between peer radio bearers (RBs) respectively supported by a user equipment (UE) and a Universal Terrestrial Radio Access Network (UTRAN), the peer RBs created by a Radio Bearer Setup procedure performed in conjunction with a Serving Radio Network Subsystem (SRNS) relocation procedure, the method comprising:
- sending a Radio Bearer Setup message from the UTRAN to the UE, the Radio Bearer Setup message indicating that SRNS relocation is to be performed and that a new RB is to be established in a first domain;
 - in response to the Radio Bearer Setup message, the UE assigning a first START value to a START_VALUE_TO_TRANSMIT variable according to the HFNs of all established RBs in the first domain;
 - the UE utilizing the START_VALUE_TO_TRANSMIT variable to set an HFN of the new RB;
 - in response to the Radio Bearer Setup message, the UE generating a START list containing a plurality of START values corresponding to a plurality of domains, the plurality of domains including the first domain;
 - in response to the Radio Bearer Setup message, the UE composing a reply message, the reply message including the START list as a first information element (IE) and including the first START value of the START_VALUE_TO_TRANSMIT variable as a second IE;
 - the UE sending the reply message to the UTRAN; and
 - the UTRAN utilizing the second IE to set a corresponding HFN for the new RB.

- [c6] 6. A wireless device comprising a central processing unit (CPU) in electrical communications with a memory, the memory comprising program code for implementing the method of claim 5.